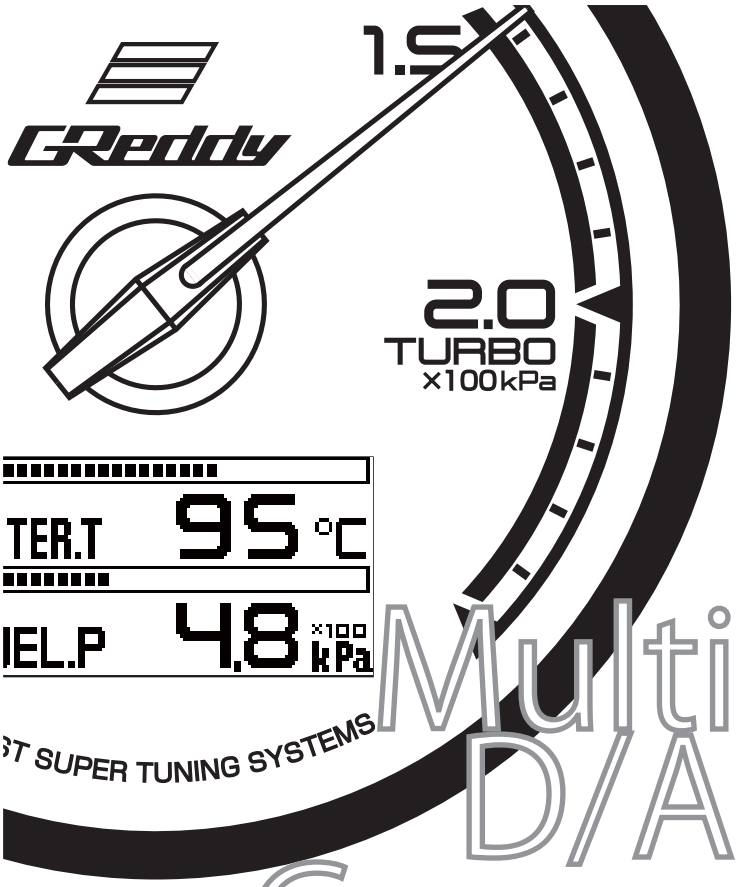


instruction manual

GReddy

Thank you very much for your recent purchase: GReddy Multi D/A Gauge. We hope this instruction manual will be helpful to you whether you are a novice or technician . Please keep this instruction manual in your car to read anytime.

◆ Relationship with our products ◆ **Please read carefully**

We made a tireless effort to develop the product for your safety and comfortable car life. We think that our product could provide better performance and convenience for your vehicle. However, there may be a chance to lose the factory-offered safety by using our product. Therefore, please read carefully in order for you to use safely and comfortably at your own risk.

1. Disclaimer — Please read carefully

To the best of our knowledge, the information contained herein is accurate. However, neither TRUST CO., LTD or any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. All materials may present unknown hazards and should be used with caution. In particular, improper use of our products and their inappropriate combination with other products and substances may produce harmful results which cannot be anticipated. Final determination of the suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist. All service performed on internal parts and equipment should be provided by qualified technicians.

Please remember the following signs as you proceed to read manual.

⚠	**Warning :** If you don't follow, drive at your own risk.	**Attention**	Follow the directions to use properly.
⚠	**Caution:** If you don't follow, may lead to breakdown of your automobile.	**Important**	Be advised to use properly.

⚠ Warning

- ⚠ Refer to your automaker's manual to ensure the safety. If used wrongly, it may cause an accident.
- ⚠ Before parking, confirm no flammable objects under the car. Use caution with muffler which has hot temperature after driving and may create a fire hazard when parked near dried and flammable objects.
- ⚠ Stop the engine if its not necessary. The exhaust ventilation contains poisonous gas and if you operate in a closed space for a long time, it may cause you carbon monoxide poisoning.
- ⚠ Do not run the engine when you take a rest in the car. If taking a break while running the engine, there is a danger of carbon monoxide poisoning.
- ⚠ Do not work shortly after the engine shutdown. There is a danger of burn injury because the entire exhaust system is extremely hot.
- ⚠ Professional Installation is recommended.There is a risk of injury if done by an unprofessional person.
- ⚠ Make sure all mounting instructions & places are examined, and don't let drop. worngly installed objects would cause the fall and it is very dangerous.
- ⚠ Do not operate Multi D/A gauge while driving. It could cause a traffic accident.
- ⚠ Check the installed areas before you drive: around oil, water, fuel lines, and deterioration of them. The mishandling of oil, water, and fuel lines would cause an engine breakage.
- ⚠ When installing sensors, use seal tape to make an installation surely. Oil and water leaking would cause a catching fire and engine wreckage.
- ⚠ Operate outside or ventilated room when handling fuel lines which may induce fire.
- ⚠ Gasoline is flammable. It is dangerous to work around the fire items.
- ⚠ Before moving a car, make sure there's nothing around the car. If don't, may lead to the dangerous situation: injury and property damage.
- ⚠ When using soldering iron and nipper, use properly. Failure to use tools may cause serious injury or illness.
- ⚠ Make sure there's nothing under the driving pedals. It is very dangerous to leave something under the pedals which lead to the non-functional brake.

⚠ Caution

⚠ Installation involves disassembly operations: inner-outer covering parts of a vehicle and modification of electrical component. Please operate carefully since we don't have any responsibility of these operations.

⚠ Make sure not to do miswiring and short. Could lead to the wreckage of all electrical components.

⚠ Do not modify the sensor cord. Could lead to a short or bad connection as well as the crash of all electrical components.

⚠ Provide insulation by vinyl tape for soldered areas.

⚠ Pressure sensor is a precision component and fragile. Do not install near vibrating place, water, and under high temperature condition.

⚠ When drilling halls for the installation of exhaust temperature sensor, do not leave debris of cutting in the pipe.

⚠ Do not install the power unit near the place with humid and dust, exposed to direct light, nozzle of heater, etc.

⚠ Do not disassemble the product. It will be exempt from warranty.

⚠ Do not install in electrically noisy environments such as ignite signal area. Could lead to the sensor glitch.

Attention

- When removing the minus terminal on the battery, there are things that lose memory: clock, audio, navigation system, electric seat. Read the instruction carefully before operation. After the operation finished, reconfigure settings according to instruction.
- Due to the precision mechanical equipment, do not drop or hit it hard.
- Soon after purchase, check all parts included as specified on the page 3 (Complete parts).
- Please contact us if you see the different numbers between the meter and power unit.
- Wipe with a dried cloth when you clean. When seeing the spots, wipe with a damp and tightly wrung out cloth.
- Should you have questions or concerns about our product,do not hesitate to contact us.

For the technician

- Please return this manual with warranty to the customer when mounting is finished.

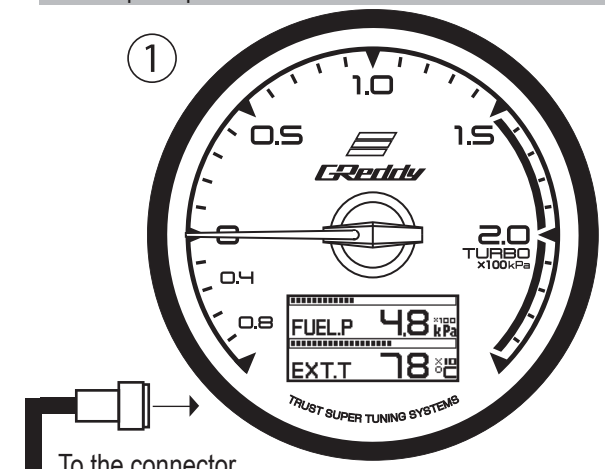
For the user

- Please pass this manual and warranty to others when renting out or transferring your vehicle possession.

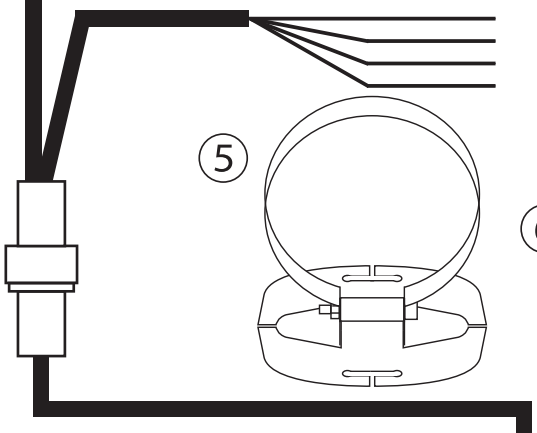
2. Product features

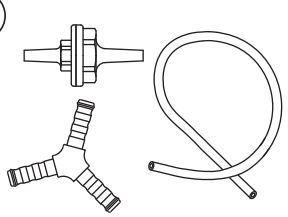
- For car manufactured in Japan equipped with12V battery.
- Simultaneous display with a maximum of 3 items. Analogue and digital displays integrating 7 data.
- 7 displaying data are boost, water temperature, oil temperature, oil pressure, fuel pressure, exhaust temperature, and power voltage.
- There are two gauge faces for boost and oil. Optimum for turbo engine as well as NA engine.
- The power unit can be installed inside of the engine room with simple waterproof. Only one harness line pulled in the car so no need to pull several extra harness lines.
- Analogue meter is viewability considered: 270-degree view.
- Backlight with super luminosity LED lasts almost forever. In addition, the selectable backlight colors are white, green, red, blue, orange, purple, and light blue.
- Illumi interlocking switch is capable of dimming.
- All settings and changes can be performed by the remote controller. Easy settings with user-friendly icons and buttons.
- Peak value memory and warning function are configurable respectively.
- Performs IG key Opening/Ending demo on both analogue/digital displays.

3. Complete parts



To the connector on the back



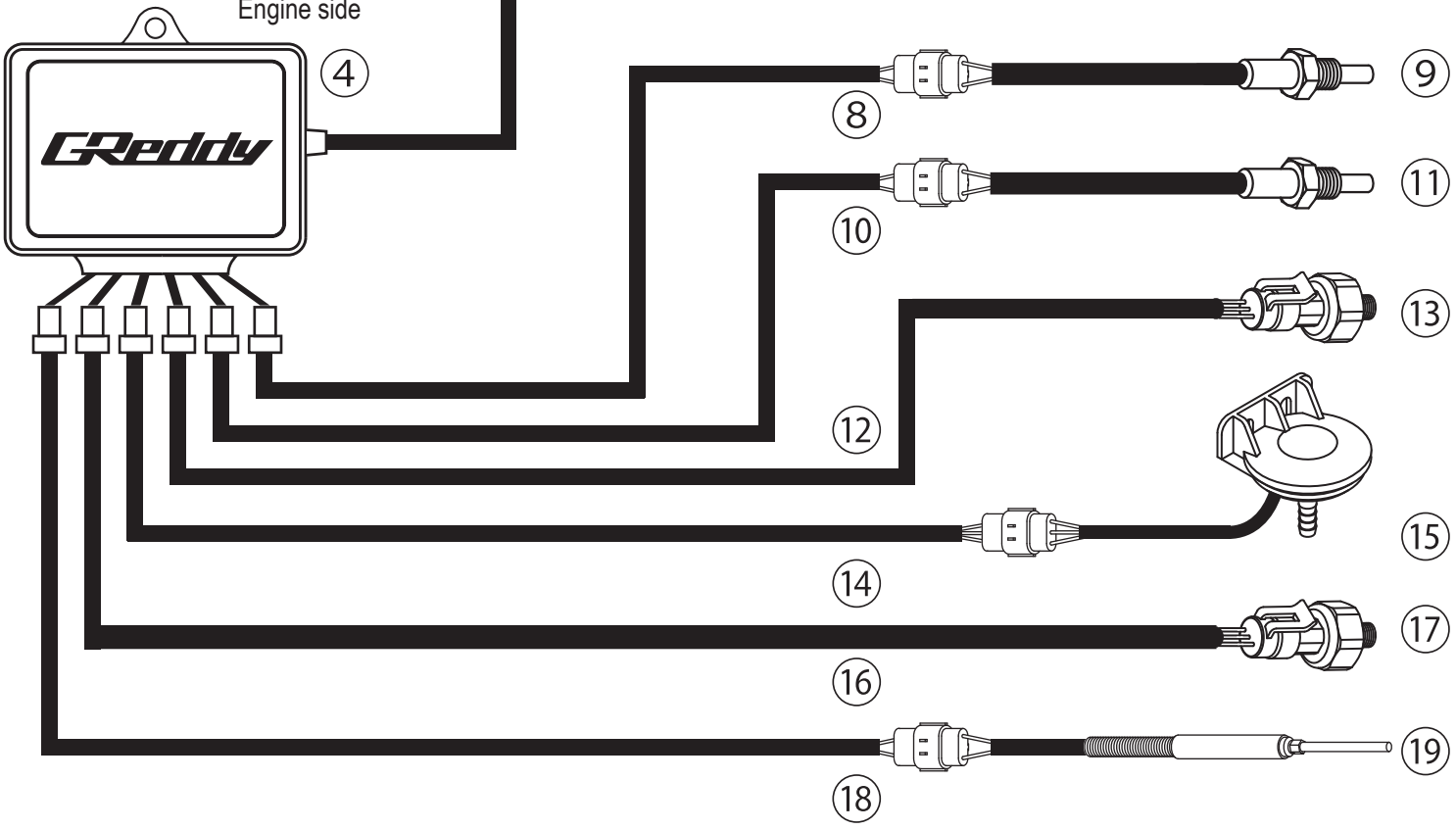


No.	Name	Remarks
①	Meter body	62Φ x 45mm in depth
②	Remote control	A battery (CR2025) included.
③	Power harness	1m at power side. 1.5m at meter side.
④	Power unit	Mounting hall 5Φ 84 x 55 x 16mm
⑤	Mounting holder	Base measurement: 64 x 55mm
⑥	3way joint 4Φ hose, Air filter	Hose 0.5m ※1
⑦	Manual	4 pages
⑧	Water sensor harness	Water/Oil/Exhaust temps in common 1.5m. Sold separately.
⑨	Water sensor	Water & oil temps in common. 1/8 PT 0.25m sold separately.
⑩	Oil sensor harness	Water/Oil-exhaust temps in common 1.5m. Sold separately.
⑪	Oil temperature sensor	Water & oil temps in common. 1/8 PT 0.25m. Sold separately.
⑫	Oil pressure sensor harness	Oil & fuel pressure in common. 1.5m. ※2
⑬	Oil pressure sensor	Oil & fuel pressure in common 1/8 PT ※2
⑭	Boost sensor harness	1.5m ※1
⑮	Boost sensor	Nipple part: 4Φ 0.25m ※1
⑯	Fuel pressure sensor harness	Oil / Fuel pressure in common 1.5m. Sold separately.
⑰	Fuel pressure sensor	Oil / Fuel pressure in common 1/8PT. Sold separately.
⑱	Exhaust temperature sensor harness	Water/Oil exhaust temps in common 1.5m. Sold separately.
⑲	Exhaust temperature sensor	Fitting 1/8PT 0.25m. Sold separately.

※1 For boost face ※2 For oil pressure face

Driving side

Engine side



4. Installation

⚠ Caution

⚠ When installing or uninstalling sensors, disconnect sensors from sensor harness. Do not twist harness on the sensor side.

⚠ Warning

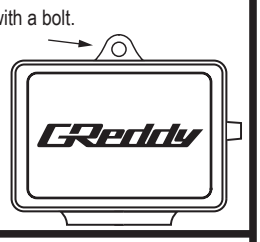
⚠ Installation process should be examined carefully. Make sure not to fall anything. Misinstallation would lead to a danger of your driving and life.

⚠ When installing sensors, fix them securely and use the seal tape not to leaking oil & water. Oil & water leaking would catch fire and lead to the wreckage of engine.

【Power unit】

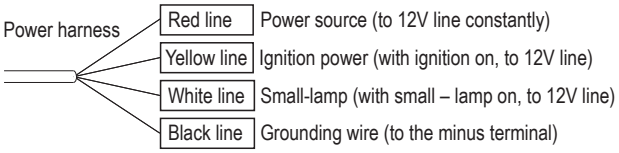
The power unit designed with simple water-resistance can be installed in the engine room but avoid water, dust, humid, and high temp.

Use a bolt(s) to fix and make sure not to fall.

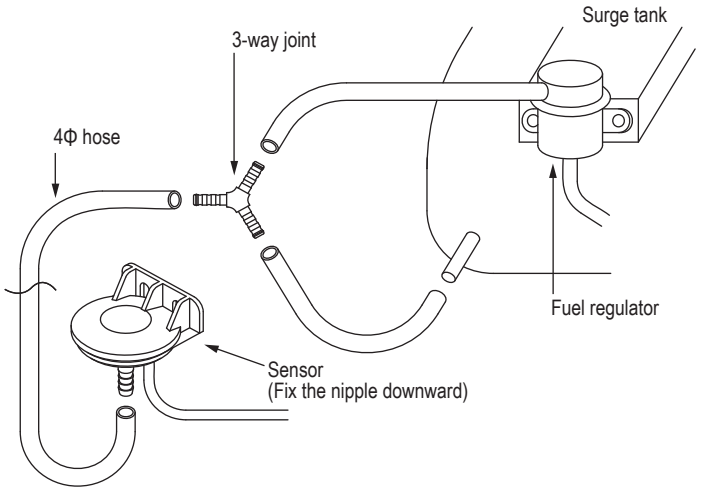


【Power harness】 ⚠ Caution

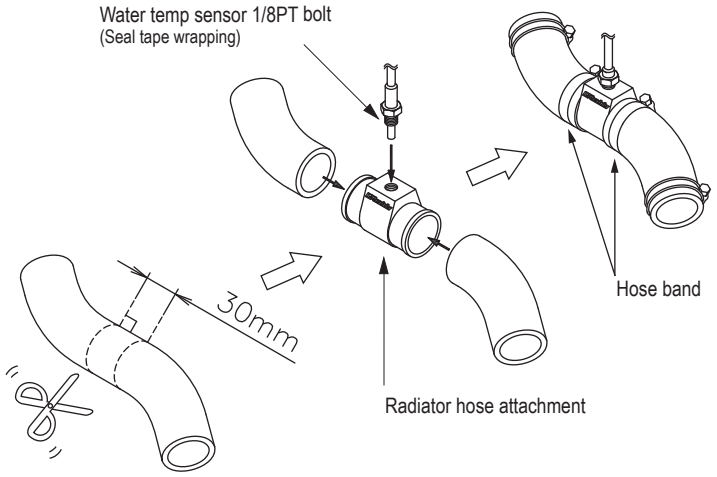
- Disconnect the minus terminal before wiring the power harness.
- Wire properly according to the colors of power harness.
- Tying the red and yellow lines to wire for the power unit, or wiring power source and ignition power reversely would cause an indicator's glitch.
- Make sure that there is no miswiring and replace the minus terminal.


Power harness
Red line
Power source (to 12V line constantly)
Yellow line
Ignition power (with ignition on, to 12V line)
White line
Small-lamp (with small – lamp on, to 12V line)
Black line
Grounding wire (to the minus terminal)

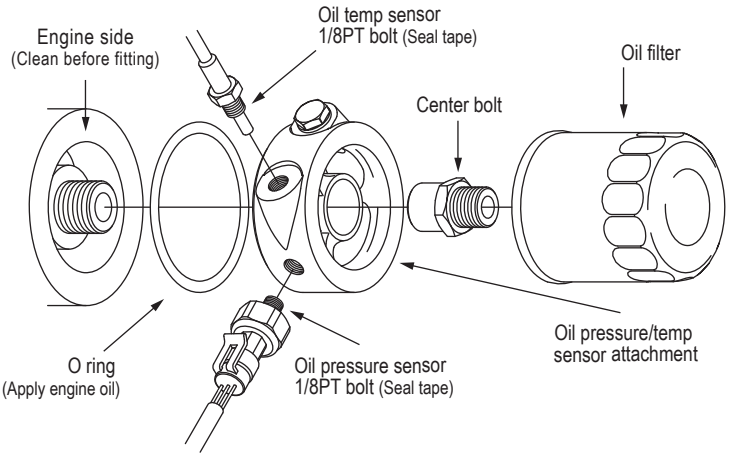
【Boost sensor】(3 way joint, orifice, 4Φ hose)



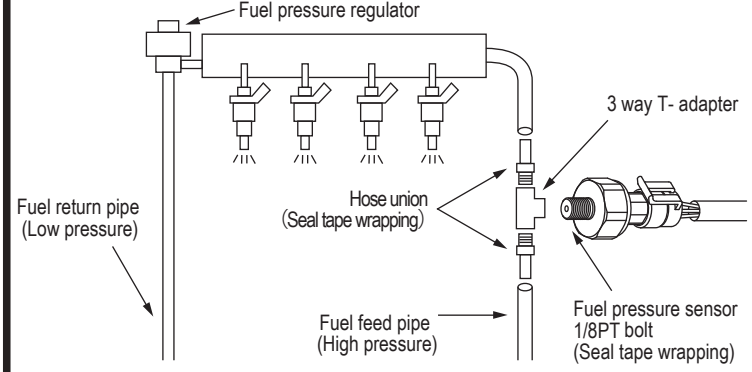
【Water temp sensor】(Radiator hose attachment)



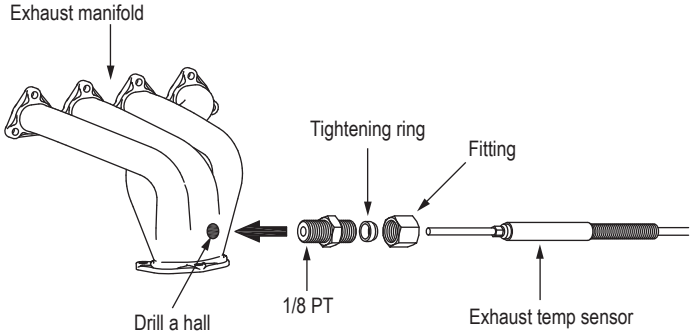
【Oil pressure & Oil temperature sensors】



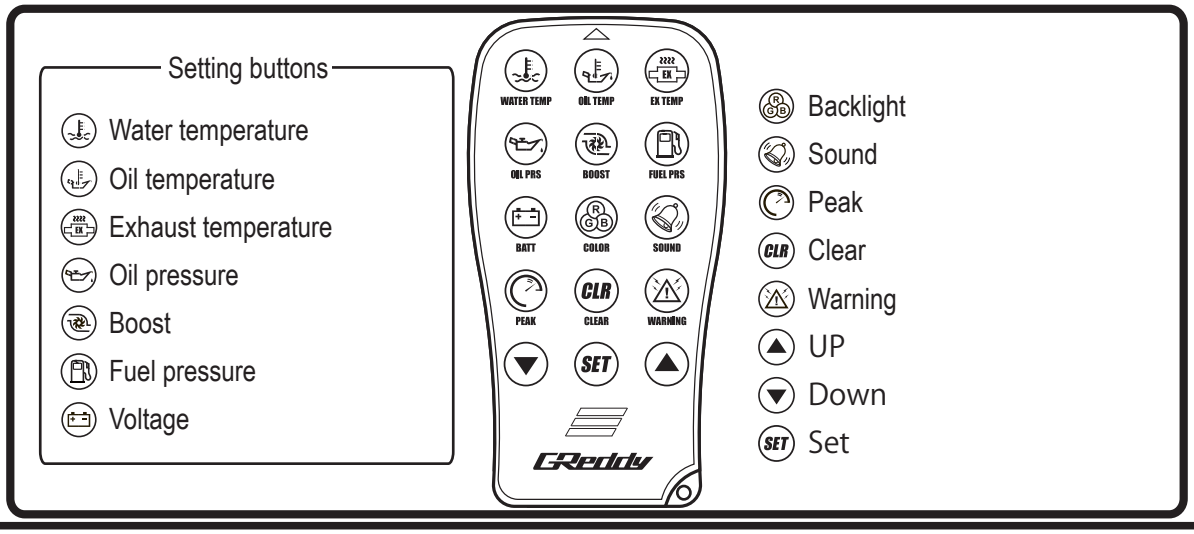
【Fuel pressure sensor】(3 way union, hose union example)



【Exhaust temp sensor】(Exhaust manifold)



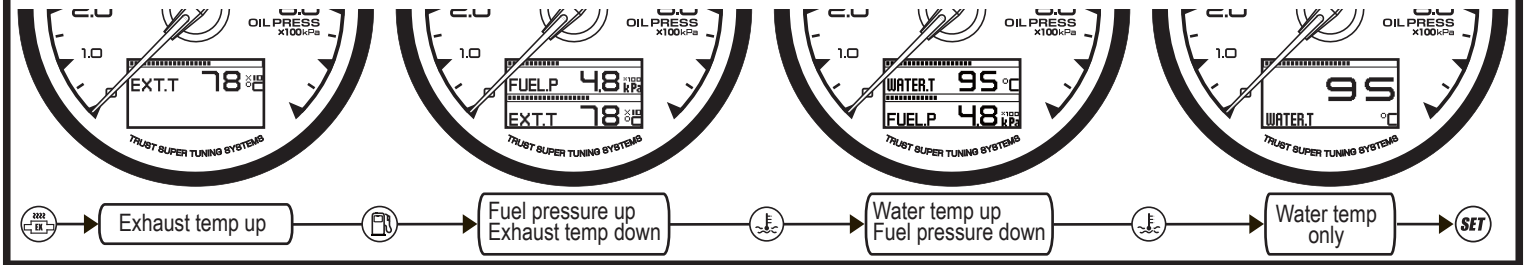
5.Remote setting – Operation



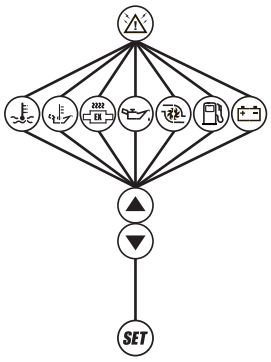
【Display setting】

○ To show 2 items – The first press, the item comes on the top, and the second, the previous item comes down & new item comes up. The third press, the bottom item disappears.
○ To show 1 item – Press the button twice to show the desired item sole.
○ Press SET to save your setting.

(Example)



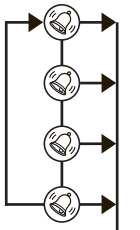
【Warning setting】



Press the warning setting button.
↓
Select the item.
↓
Set values by pressing up / down buttons.
↓
SET: Save your setting.

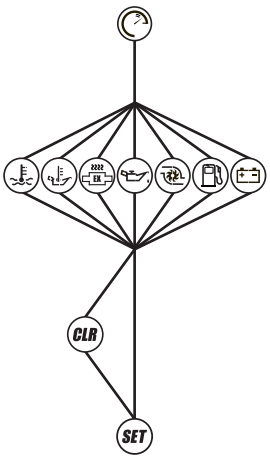
【Sound setting】

Press the sound button to hear the current sound.
Each time pressing, the sound varies. “Set” to save your setting.



Setting 1 (PiPi--------)
Setting 2 (Pi-pipi, Pi-pipi)
Setting 3 (Pipi--Pipi)
Setting 4 (Silent)
SET to save your setting.

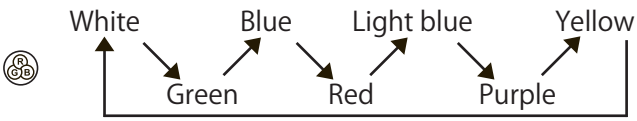
【Peak value display setting】



Peak button: Display peak value.
↓
Select each item to display each peak value.
↓
CLR: Clear everything.
↓
SET: Back to the real time display.

【Backlight setting】

Each time pressing backlight button, the color varies as follows.



【Special operations】

Press & hold two buttons at the same time to reset.
Restart: Shut down and start again.
※Operating sound : PiPiPiPiPi Pi-PiPiPi
Reset: Back to the factory default
※Operating sound : Pi--PiPiPi Pi--PiPiPi Pi--PiPiPi

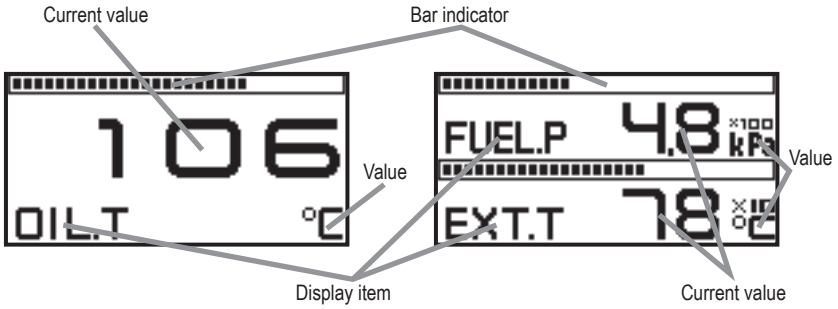
※Idle for 5 seconds, get back to the real time display.

6. Operation – Display

【 About display 】

○Each item shows the following ranges and values.

Item	Display	MIN	MAX	Value
Boost	BOOST	-100	250	kPa
Water temp	WATER.T	0	150	℃
Oil temp	OIL.T	0	150	℃
Oil press	OIL.P	0.0	12.0	×100 kPa
Fuel press	FUEL.P	0.0	12.0	×100 kPa
Exhaust temp	EXT.T	0	12.0	×10 ℃
Voltage	BATT	9.0	17.0	V



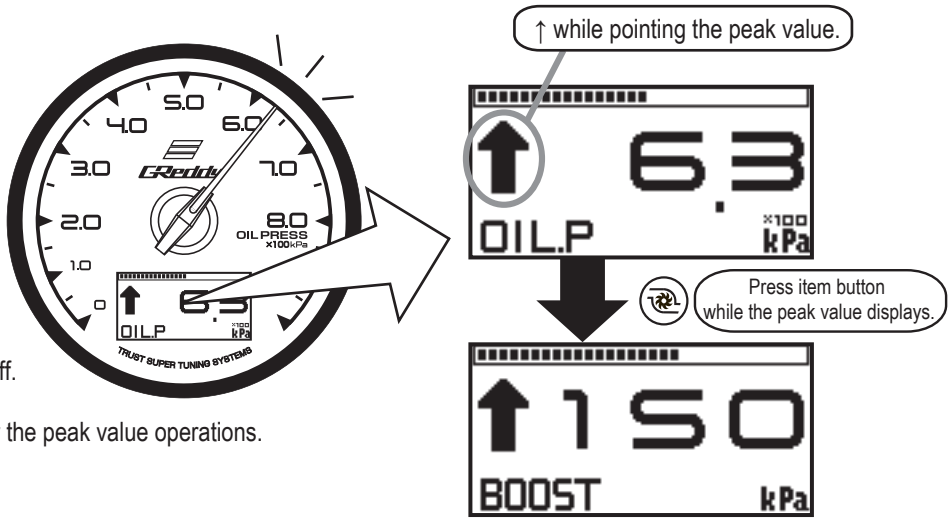
1 item display　　2-item display

【 Peak value display 】

○ During the real time display, if the peak button is pressed, the boost display points the peak value; the oil pressure display points the peak value and the digital display as well.

○ While the meter pointing the peak value, if another button was clicked, its peak value will be shown.

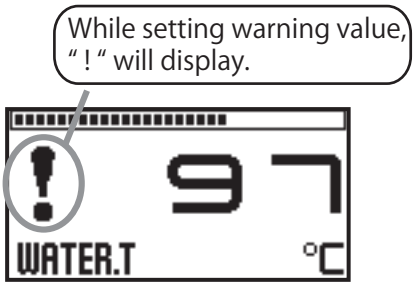
※ Multi D/A Gauge stores updates after the power-off.



※ Please refer to “5. Remote setting – operation” for the peak value operations.

【 Warning settings 】

○During the real time display, press the warning setting button, select an objective item, and switch to its warning value setting.



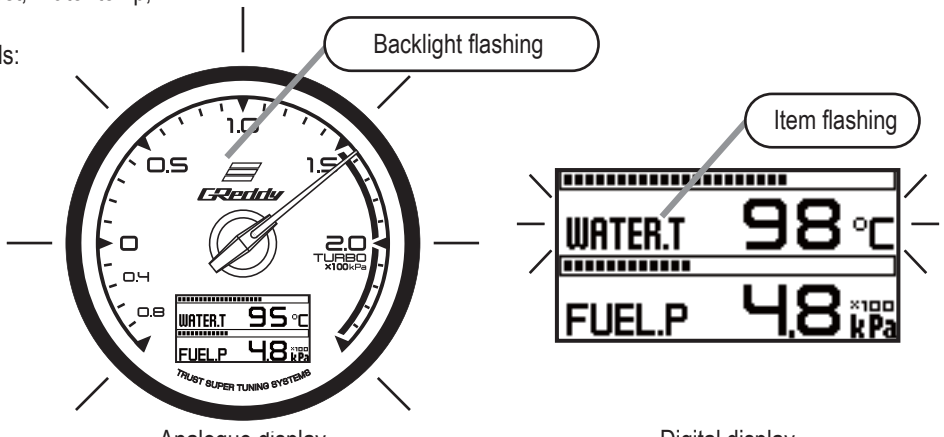
【 Warning behaviors 】

○ When each item reaches its preset value, “Warning action” performs.
“Warning action” when exceeding preset levels: Boost, Water temp, Oil temp, Exhaust temp.
“Warning action” when being lower than preset levels: Oil pressure, Fuel pressure, and Voltage.

・Analogue display
Backlight flashing with warning sound.

・Digital display
Item flashing with warning sound.

※ No warning sound if the item is not on the display even if its in the preset warning value.



Analogue display　　Digital display

※ Please refer to “5.Remote setting – operation” for warning & sound settings.

7.Troubleshooting

Please refer to the following troubleshooting advices.

Symptom	Cause	Solution
• Indicating lower value. • With ignition on, the pointer is not at zero.	• Grounding wire is not on the minus terminal on the battery. • Miswiring.	• Extend the black line from the power source and connect to the minus terminal. • Please refer to “4 Installation” and rewire them.
• “Warning action” outside the preset value. • Pointing strange value. • With power on, the pointer doesn’t function.	• Picking up noise from ignition signal or other signals. • Wiring is short circuit. • Wiring is disconnected or break. • Sensor harness’s coupler is connected mistakenly.	• Avoid noise occurring areas and reinstall sensor harness. • Check if any damage on wire and if it is touching car body or not. • Check if the coupler is disconnected or the wire is damaged. • Check if the coupler is installed properly.
• With ignition off, the pointer doesn’t come back at zero. • No ending demo.	• Power source and ignition power source are not connected each other.	• Wire power source and ignition power separately.

8. Service after the sales

Please don't hesitate to inform us if there is anything unclear.

If you find different manufacturing numbers between meter and power unit, please bring it to the place you purchased or let us know directly.

Multi D/A Gauge is warranted for one year from the date of purchase against manufacturer defects. Coverage is valid only with proof of purchase from an Authorized Dealer. Alteration of this product will void warranty.

Additional services are available for a nominal charge.